



STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
P.O. BOX 942836
SACRAMENTO, CALIFORNIA 94236-0001



**ASSOCIATE HYDROELECTRIC
POWER UTILITY ENGINEER**

**OPEN EXAMINATION
CONTINUOUS FILING**

HOW TO APPLY

Applications (Form 678) will be accepted on a continuous basis and will be held until an examination is scheduled. Test dates are established by the Department of Water Resources. Testing is considered continuous as dates can be set at any time and the eligible list is merged. Once examination date(s) have been established and interviews scheduled, subsequent applications received will be held until the next administration of the examination. Submit applications to the Department of Water Resources, P.O. Box 942836, 1416 9th Street, Room 320, Sacramento, CA 94236-0001.

**DO NOT SUBMIT APPLICATIONS TO THE
STATE PERSONNEL BOARD**

If you have a disability and need special testing arrangements, mark the appropriate box in Part 2 of the "Application for Examination". You will be contacted to make specific arrangements.

NOTE: Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

SALARY RANGE: \$4415 - \$5363

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II, "or" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirements.

Education: Graduation from college with major work in electrical, electronic, mechanical, or civil engineering. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) **And**

Either I

Two years of engineering experience in the electrical utilities field and/or in the operation and maintenance of pumping and generating equipment at the Electrical Engineer, Range B, or Mechanical Engineer, Range B, level in California state service.

Or II

Three years of engineering experience in the electric utilities field and/or in the operation and maintenance of pumping and generating equipment, at least two years of which shall have been comparable in responsibility to that of an Electrical Engineer, Range B, or Mechanical Engineer, Range B, in California state service.

THE POSITION

Under direction, incumbents perform difficult engineering work relating to the electric utilities field and/or operation and maintenance of pumping and generating equipment, and other related work.

Positions exist statewide with the Department of Water Resources.

EXAMINATION INFORMATION

This examination will consist of a qualifications appraisal interview only. In order to obtain a position on the eligible list, a minimum rating of 70.00% must be attained in the interview.

Qualifications Appraisal Interview - Weighted 100.00%

Scope:

In addition to evaluating the competitors' relative abilities as demonstrated by quality and breadth of experience, emphasis in the examining interview will be on measuring competitively, relative to job demands, each competitor's:

A. Knowledge of:

1. Engineering theory and practices relating to power generation, transmission, distribution, and marketing.
2. Electric utility operation and management.
3. Functions, responsibilities, and procedures of regulatory and government agencies including the Public Utilities Commission, the Federal Energy Regulatory Commission, and the California Energy Commission, in the electric utility field.
4. Planning, design, construction, and operation of major generating plants, power transmission systems, and pumping plants.
5. Methods of determining the optimum capacity and energy output of generating plants.
6. Power marketing and economics, including the market for and value of electric power, methods of marketing power and rates, agreements.
7. Operating, maintaining, and testing of electrical and mechanical equipment and systems for plants, switchyards, reservoir outlets, and aqueduct control features.
8. Environmental issues and policies.
9. Unit operating and loading procedures and criteria.
10. Standards of the American National Standards Institute, Institute of Electrical and Electronic Engineers, and American Society of Mechanical Engineers.
11. Instrumentation and control circuitry and electrical protection.
12. Servo systems and governors; bearings; lubrication; metal working; machining and welding; nondestructive examination.
13. Alignment and balancing of rotating machinery including vibration measurement.
14. Methods of maintenance, repair, and testing.
15. Power system operation and control.
16. Power system studies, load flow, stability, and fault analyses.

B. Ability to:

1. Analyze situations accurately and adopt an effective course of action.
2. Prepare clear and concise reports.
3. Prepare procedures and manuals.
4. Make feasibility studies.
5. Interpret, prepare, and revise electrical and mechanical drawings and schematics and relay and control logic diagrams.
6. Assist and advise others on maintenance and repair procedures, materials, and tools.
7. Negotiate, administer, and coordinate contracts such as for maintenance, repair, testing, consultation, power purchase and sales.
8. Conduct and coordinate special test and analysis activities including failure analysis.
9. Use personal computers.

ELIGIBLE LIST INFORMATION

Names of successful competitors will be merged onto the list in order of final scores, regardless of date. Eligibility expires after 12 months. Candidates may test only once during a 12-month period.

Veterans Preference Credit will not be granted in this examination as it does not qualify as an entrance examination under the law.

IT IS AN OBJECTIVE OF THE STATE OF CALIFORNIA TO ACHIEVE A DRUG-FREE STATE WORKPLACE. ANY APPLICANT FOR STATE EMPLOYMENT WILL BE EXPECTED TO BEHAVE IN ACCORDANCE WITH THIS OBJECTIVE BECAUSE THE USE OF ILLEGAL DRUGS IS INCONSISTENT WITH THE LAW OF THE STATE, THE RULES GOVERNING CIVIL SERVICE AND THE SPECIAL TRUST PLACED IN PUBLIC SERVANTS.

AN EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER - EQUAL OPPORTUNITY FOR ALL REGARDLESS OF RACE, COLOR, CREED, NATIONAL ORIGIN, ANCESTRY, SEX, MARITAL STATUS, DISABILITY, RELIGIOUS OR POLITICAL AFFILIATION, AGE, OR SEXUAL ORIENTATION.

ASSOCIATE HYDROELECTRIC POWER UTILITY ENGINEER H050-3675 CONTINUOUS FILING

SEE REVERSE SIDE FOR ADDITIONAL INFORMATION

GENERAL INFORMATION

It is the candidate's responsibility to contact the Recruitment and Selection Services Section of the Department of Water Resources, (916) 653-7109 three days prior to the written test date if he/she has not received his/her notice.

For any examination without a written feature it is the candidate's responsibility to contact the Recruitment and Selection Services Section of the Department of Water Resources, (916) 653-7109 three weeks after the final filing date if he/she has not received a progress notice.

If a candidate's notice of oral interview, EDA, performance tests fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

Applications are available at State Personnel Board offices, local offices of the Employment Development Department, and offices of the Department of Water Resources.

If you meet the requirements stated on the reverse, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination described on the other side of this bulletin will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

The Department of Water Resources reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. Ordinarily, qualifications appraisal interviews are scheduled in Sacramento and Los Angeles. However, locations of interviews may be limited or extended as conditions warrant.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) subdivisional promotional, 2) departmental promotional, 3) multidepartmental promotional, 4) servicewide promotional, 5) open eligible list. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on this bulletin. In the case of continuous testing examinations, names are merged into the appropriate lists in order of final test scores (except as modified by veterans preference credits) regardless of the date of the test, and the resulting eligible lists will be used only to fill vacancies in the area shown on the bulletin.

Promotional Examinations Only: Competition is limited to employees who have a permanent civil service appointment. Under certain circumstances, other employees may be allowed to compete under provisions of Rules 234, 235 and 235.2. State Personnel Board Rules 233, 234, 235, 235.2 and 237 contain provisions regarding civil service status and eligibility for promotional examinations. These rules may be reviewed at departmental personnel offices or at the Information Counter of State Personnel Board offices.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

Weighted Written Examinations Only: Your score on the written test will be multiplied by its stated weight and your score on the interview will be multiplied by its stated weight. Then, the two weighted scores will be added to obtain your combined score.

Interview Scope: If an interview is conducted, in addition to the scope described on the other side of this bulletin, the panel will consider education, experience, personal development, personal traits, and fitness. In appraising experience, more weight will be given to the breadth and recency of pertinent experience and evidence of the candidate's ability to accept and fulfill increasing responsibilities than to the length of his/her experience. Evaluation of a candidate's personal development will include consideration of his/her recognition of his/her own training needs; his/her plans for self-development; and the progress he/she has made in his/her efforts toward self-development.

Veterans Preference: California law allows granting of veterans preference points in open entrance examinations and open nonpromotional examinations. Credit in **open entrance examinations** is granted as follows: 10 points for veterans, widows, and widowers of veterans, and spouses of 100% disabled veterans; and 15 points for disabled veterans. Credit in **open nonpromotional examinations** is granted as follows: 5 points for veterans; and 10 points for disabled veterans. Directions for applying for veterans preference points are on the Application for Veterans Preference form (SPB-1093) which is available from State Personnel Board offices, written test proctors, and the Department of Veterans Affairs, P.O. Box 942895, Sacramento, CA 94295-0001.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing General Education Development (GED) Test; 2) taking the GED Test and scoring at least 35 on each of the five subtests and averaging 45 for all of the subtests; 3) completion of 12 semester units of college-level work; 4) certification from the State Department of Education, a local school board, or high school authorities that the candidate is considered to have education equivalent to graduation from high school; or 5) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.

Career Credits: In open, nonpromotional examinations, career credits are granted to: 1) State employees with permanent civil service status, 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have 12 consecutive months of service in an exempt position, and 3) individuals who have served one full year in, or are graduates of, the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may be eligible for career credits, but they must explain their civil service status in the appropriate section of the application Form 100-678. (Section 4 of Article VII of the California Constitution is posted at the State Personnel Board, 801 Capitol Mall, Sacramento.)

(916) 653-7109
TDD: (916) 653-1804
California Relay Service: 1-800-735-2929 (TDD)
1-800-735-2922 (Voice)

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device.

O(Rcv.1/01)

(LS)